

DIAPHRAGMATIC HERNIA

Also called: Hernia – diaphragmatic, congenital hernia of the diaphragm

Diaphragmatic hernia is a congenital birth defect in which an opening is present in the diaphragm (the muscle that separates the chest cavity from the abdominal cavity). Hernia means “rupture”. With this type of congenital birth defect, some of the organs such as the stomach, small intestine, spleen, part of the liver and the kidney, normally found in the abdomen move up into the chest cavity through this abnormal opening.

With these organs taking up space in the chest cavity, the lungs do not have space to develop properly. Respiratory distress usually develops soon after birth, because of the ineffective movement of the diaphragm and crowding of the lung tissue, which causes the lungs to collapse. Diaphragmatic hernia occurs in 1 out of every 2,200 to 5,000 live births.

There are two types of diaphragmatic hernias:

A Bochdalek hernia makes up approximately 90% of all diaphragmatic hernia cases. This hernia involves an opening on the left side of the diaphragm allowing the stomach and intestines to usually move up into the chest cavity. Babies born with a Bochdalek hernia are more likely to have one of the following birth defects – congenital heart defect, a chromosomal abnormality, and/or defects involving the central nervous system.

A Morgagni hernia occurs less frequently. This hernia involves an opening on the right side of the diaphragm allowing the liver and intestines to usually move up into the chest cavity.

Treatment for a diaphragmatic hernia involves an operation to move the abdominal organs from the chest back into the abdomen and repairing the opening in the diaphragm. Although the abdominal organs are now in the right place, the lungs still remain underdeveloped. The baby will usually need to have breathing support for a period of time after the operation.

Babies born with diaphragmatic hernia can have long-term problems and often need regular follow-up after going home from the hospital. Many babies will have chronic lung disease and may require oxygen or medications to help their breathing for weeks, months, or years. Many babies will have gastroesophageal reflux. Acid and fluids from the stomach move up into the esophagus (the tube that leads from the throat to the stomach), and can cause heartburn, vomiting, feeding problems, or lung problems.

Some babies will have difficulty growing, known as failure to thrive. The children with the most serious lung problems are most likely to have growing problems. Because of their illness, they often require more calories than a normal baby in order to grow and become healthier. Gastroesophageal reflux can also cause feeding problems, preventing a baby from eating enough to grow.

Some babies can have developmental problems. They may not roll over, sit, crawl, stand, or walk at the same time healthy babies do. Physical therapy, speech therapy, and occupational therapy are often helpful for these babies to gain muscle strength and coordination.

Some babies may have some degree of hearing loss. A hearing test should be performed prior to discharge from the hospital.

NOTE: This Web page was compiled from a variety of sources including the online resources of Medline Plus, St. Louis Children's Hospital and other resources listed below, but is not intended to substitute or replace the professional medical advice you receive from your physician. The content provided here is for informational purposes only, and was not designed to diagnose or treat a health problem or disease. Please consult your health care provider with any questions or concerns you may have regarding this specific condition.

RESOURCES

NOTE: This page contains links to other World Wide Web sites with information about this disorder. The Department of Health and Senior Services (DHSS) hopes you find these sites helpful, but please remember the DHSS does not control nor does it necessarily endorse the information presented on these Web sites.

For a complete list of resources related to birth defects, including state programs and resources, support groups and not-for-profit organizations click on the following link. <http://www.dhss.mo.gov/BirthDefects/Resources.pdf>

Genetic Alliance

<http://www.geneticalliance.org>

MedLine Plus

<http://www.medlineplus.gov>

National Center on Birth Defects and Developmental Disabilities (NCBDDD)

<http://www.cdc.gov/ncbddd/>

St. Louis Children's Hospital

<http://www.stlouischildrens.org/tabid/88/itemid/2689/Diaphragmatic-Hernia.aspx>

GENETIC TERTIARY CENTERS

How to Obtain Genetic Services

Your family physician can usually provide information regarding genetic services in your area. Genetic clinics are periodically held in a location near you. For information please contact one of the centers listed below.

[Cardinal Glennon Children's Hospital](#)

St. Louis, Missouri

314-577-5639

[Children's Hospital at University Hospital and Clinics](#)

Columbia, Missouri

573-882-6991

[Children's Mercy Hospital](#)

Kansas City, Missouri

816-234-3290

[St. Louis Children's Hospital](#)

St. Louis, Missouri

314-454-6093